

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA  
DOCKET NO. 95-1000-E - ORDER NO. 96-15 ✓  
January 9, 1996

IN RE: Application of South Carolina       ) ORDER APPROVING  
Electric & Gas Company for an       ) RATES AND CHARGES  
Increase in the Company's       )  
Electric Rates and Charges.       )

I.

INTRODUCTION

This matter is before the Public Service Commission of South Carolina (the Commission) on the July 10, 1995 Application of South Carolina Electric & Gas Company (SCE&G or the Company) for adjustments in the Company's electric rates and charges, and for changes in the Company's General Terms and Conditions for service. The Application was filed pursuant to S.C. Code Ann., Section 58-27-870 (1976, as amended), and R. 103-821 of the Commission's Rules of Practice and Procedure.

By letter, the Commission's Executive Director instructed the Company to cause to be published a Notice of Filing and Hearing, in a newspaper of general circulation in the area affected by the Company's Application. The Notice of Filing and Hearing indicated the nature of the Company's Application and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file the appropriate pleadings. The

Company was likewise required to directly notify all customers affected by the proposed rates and charges. The Company furnished affidavits demonstrating that the Notice was duly published in accordance with the instructions of the Executive Director and certified that a copy of the Notice was mailed to each customer affected by the rates and charges proposed in the Company's Application. Petitions to Intervene were received from the Consumer Advocate for the State of South Carolina (the Consumer Advocate), the United States Department of Navy (Navy), the South Carolina Energy Users Committee (SCEUC), South Carolina Fair Share, John D. Ruoff, Ph.D., W. Davis Folsom, Mr. and Mrs. Timothy K. Burgess, and Mr. Marion E. Hill.

The Company's presently authorized rates and charges were approved by Order No. 93-465, issued June 7, 1993, in Docket No. 92-619-E. The rates and charges as originally requested by the Company in the present docket would produce an increase in annual revenues of approximately \$76.7 million dollars, and provide a return on common equity of 12.25%, according to the Company's calculations. By letter of October 19, 1995, the Company informed the Commission that it was revising its application to reflect a September 1995 Capital Structure and revised Cope costs.

The Commission Staff made on-site investigations of the Company's facilities, audited the Company's books and records, and gathered other detailed information concerning the Company's operations. The Consumer Advocate, SCEUC, The United States Department of Navy and John C. Ruoff likewise conducted discovery.

A public hearing was held in the Offices of the Commission from November 6, 1995 through November 9, 1995 and on November 16, 1995. The Honorable Rudolph Mitchell presided. SCE&G was represented by Belton T. Zeigler, Esquire, Sarena D. Burch, Esquire, and Francis P. Mood, Esquire. The Consumer Advocate for the State of South Carolina was represented by Philip S. Porter, Esquire, Nancy V. Coombs, Esquire, and Hana Williamson, Esquire. The Intervenor United States Department of Navy, was represented by Audrey J. Van Dyke, Esquire. The South Carolina Energy Users Committee was represented by Arthur G. Fusco, Esquire. Dr. John C. Ruoff appeared pro se. Mr. Timothy Burgess appeared pro se. The Commission Staff was represented by F. David Butler, General Counsel, and Florence P. Belser, Staff Counsel. The other intervenors did not appear at the Hearing.

The Company presented the direct testimony of Lawrence M. Gressette, Jr., Bruce D. Kenyon, William B. Timmerman, Jimmy E. Addison, Michael O'Sullivan, George C. How, John D. McClellan, Charles E. Benore, George A. Schreiber, Jr., the supplemental testimony of Jimmy E. Addison, the reply testimony of Edward L. Delahanty and the rebuttal testimony of Jimmy E. Addison, John D. McClellan, Charles A. Benore, Michael O'Sullivan, and Dr. Julius A. Wright. The Consumer Advocate presented the testimony of Phillip E. Miller, Dr. Robert A. Sinclair and Allen I. Schwartz. The Navy presented testimony of John B. Legler and Ralph C. Smith. The parties stipulated into evidence the testimony of Maurice Brubaker on behalf of the Navy, and the testimony of Nicholas Phillips, Jr.,

on behalf of the South Carolina Energy Users Committee (SCEUC). The Commission Staff presented the testimony of Thomas L. Ellison, A. R. Watts, Raymond C. Sharpe, III, and Dr. James Spearman.

II.

FINDINGS OF FACT

Based upon the Application, the testimony, and exhibits received into evidence at the hearing and the entire record of these proceedings, the Commission now makes the following findings of fact:

1. South Carolina Electric & Gas Company is an electrical utility operating in 24 counties in the central and southern areas of South Carolina where it is engaged in the generation, transmission, distribution and sale of electricity to the public for compensation. SCE&G's retail electric operations in South Carolina are subject to the jurisdiction of the Commission pursuant to S.C. Code Ann., Section 58-27-10, et seq. (1976), as amended. (The subject of this proceeding is SCE&G's electric retail operations in South Carolina). SCE&G's wholesale electric operations are subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC). In addition to its electric operations, SCE&G also provides natural gas services and transit services, subject to the jurisdiction of the Commission pursuant to S.C. Code Ann., Section Section 58-5-10, et seq. (1976) as amended.

2. The appropriate test year period for the purposes of this proceeding is a twelve-month period ending March 31, 1995.

3. The Company sought at the onset of the hearing, an

increase in annual revenues of \$76.7 million.

4. The appropriate operating revenues for the Company's retail operations for the test year under present rates and after accounting and pro forma adjustments are \$932,312,000.

5. The appropriate operating revenues for SCE&G's retail operations under the approved rates are \$999,777,000 which reflects a net authorized increase in operating revenues of \$67,465,000.

6. The appropriate operating expenses for the Company's South Carolina operations for the test year under its present rates and after accounting and pro forma adjustments are \$736,340,000.

7. The appropriate operating expenses for the Company's retail operations under the approved rates are \$762,314,000.

8. The Company's reasonable and appropriate federal and state income tax expense should be based on the use of a 35% federal tax rate and a 5.0% South Carolina tax rate, respectively.

9. The Company's appropriate level of net operating income for return and after accounting and pro forma adjustments is \$195,972,000 for SCE&G's retail operations.

10. The appropriate net income for return under the rates approved and after all accounting and pro forma adjustments is \$237,463,000 for retail operations.

11. The appropriate total income for return after all accounting and pro forma adjustments is \$197,642,000, and under the rates approved, after all accounting and pro forma adjustments, is \$239,486,000.

12. It is appropriate to allow SCE&G to adjust the

amortization of certain employment related costs to reflect changes in the overall cost of labor, other post-retirement employee benefits (OPEB), severance pay, early retirement benefits, pension plan costs and long-term disability plan costs.

13. A year-end original cost rate base of \$2,494,972,000 for retail operations consisting of the components set forth in Table B of this Order shall be adopted.

14. The capital structure utilized by the Commission in this proceeding for the determination of the fair overall rate of return is the capital structure of South Carolina Electric & Gas, updated to September 30, 1995.

15. The embedded cost rate for long-term debt of 7.34% and its embedded cost rate for preferred stock of 7.67% as of September 30, 1995 have been used in the determination of the fair overall rate of return approved herein.

16. The fair rate of return on common equity which SCE&G should be allowed the reasonable opportunity to earn is 12.00%, which is the rate of return adopted by the Commission for this proceeding. The capital structure and cost of capital which the Commission has approved herein produce an overall rate of return of 9.60% for SCE&G retail electric operations as depicted in the

following table:

TABLE A

<u>COMPONENT OF CAPITAL STRUCTURE</u>	<u>RATIO</u> %	<u>EMBEDDED COST/RATE</u> %	<u>OVERALL COST/RATE</u> %
Long Term Debt	48.97	7.34	3.59
Preferred Stock	2.76	7.67	.21
Common Equity	48.27	12.00	5.80
	<u>100.00</u>		<u>9.60</u>

17. It is appropriate to allow SCE&G to shift approximately \$257 million of depreciation reserves presently booked against its transmission and distribution assets to its nuclear production assets.

18. It is appropriate to allow SCE&G to shorten the amortization of several of its regulatory assets beginning in July 1997.

19. The Commission finds it appropriate to allow the Company to create a Storm Damage Reserve.

20. The rate designs and rate schedules approved by the Commission and the modifications thereto as described herein are appropriate and should be adopted.

21. In ruling on a motion of SCEUC, the Commission finds Dr. Wright's testimony to be admissible.

### III.

#### STIPULATION

In prefiled testimony, the Staff of the Public Service Commission of South Carolina, the Consumer Advocate, the South Carolina Energy Users Committee, and the Department of Navy raised

issues related to the Application by SCE&G. Additionally, all the parties mentioned above, including Dr. Ruoff, submitted issues lists. To encourage the discussion and possible settlement of these issues, three prehearing conferences were held in the Offices of the Public Service Commission on October 2, 1995, October 19, 1995 and October 30, 1995. As a result of the discussions held at these conferences, a Stipulation was entered into by and among South Carolina Electric & Gas Company, the South Carolina Department of Consumer Affairs, the South Carolina Energy Users Committee, Department of Navy and John C. Ruoff, dated November 3, 1995. The Stipulation shows agreement by all the above parties a) to the updated capitalization as of September 30, 1995 as shown in revised Exhibit D-VII, b) to the capital costs, O&M expenses and depreciation expenses related to the Cope plant, c) to amortization periods for DSM programs and the Demolition of Parr and Hagood facilities, and d) to certain rate and General Terms and Conditions changes as addressed by both the Company and the Public Service Commission Staff. This Stipulation was entered as Hearing Exhibit 1 of this proceeding. This Stipulation, attached hereto as Attachment A, is hereby approved, and made a part of this Order.

IV.

EVIDENCE AND CONCLUSIONS

A.

Evidence and Conclusions for Finding of Fact No. 1

The evidence supporting the finding concerning the Company's business and legal status is contained in the Company's Application



and in prior Commission Orders and the docket files of which the Commission takes judicial notice. This finding of fact is essentially informational, procedural and jurisdictional in nature and the matters it involves are uncontested.

B.

Evidence and Conclusions for Finding of Fact No. 2

The evidence for this finding concerning the test period is contained in the Application of the Company and the testimony and exhibits of Company witness Addison, and Staff witness Ellison. A fundamental principle of the ratemaking process is the establishment of a test year period. The reliance upon the test year concept, however, is not designed to preclude the recognition and use of other historical data which may precede or data which may post date the selected twelve month period where it is appropriate to do so.

Integral to the use of a test year is a necessity to make normalizing adjustments to the historic test year figures. Only those adjustments which have reasonable and definite characteristics and which tend to influence reflected operating expenses are made in order to give proper consideration to revenues, expenses, and investments. Parker v. South Carolina Public Service Commission, et.al., 280 S.C. 310, 313 S.E.2d 290 (1984). Adjustments may be allowed for items occurring in the historic test year but which will not recur in the future; or to give effect to items of a extraordinary nature by either normalizing or annualizing such items to reflect more accurately

their annual impact; or to give effect to any other item which should have been included or excluded during the historic test year. The Commission finds that the twelve months ending March 31, 1995 to be the reasonable period on which to make its ratemaking determinations.

C.

Evidence and Conclusions for Finding of Fact Nos. 3-11

1.

**Cope Plant - Construction Costs, Operating  
Expenses and Depreciation Expense**

The Company is nearing the completion of the construction of a new 385 MW coal fired generating facility near Cope, South Carolina (Cope Plant). The Company's total cost of construction will be \$436,087,487 based on the schedule of payments under the terms of the construction contract with Duke/Flour Daniel, Company support costs and AFUDC accruals. The Company has asked that rates to reflect these costs of construction be implemented in two phases. Phase I, which will be effective on January 15, 1996, or at such date thereafter that the Cope Plant begins commercial operation, will include total construction costs of \$421,183,446. Phase II will begin with the first billing cycle of January 1997 and will reflect additional construction costs of \$14,904,041. Phase I will also contain an annual depreciation expense of \$13,267,279 and operating and maintenance expenses of \$8,549,870. In Phase II, depreciation expense increases to \$13,736,756. (Tr. Vol. 3, p. 257-258).

All parties to the Stipulation agreed with this approach and the Staff included the same adjustments in their report. The Commission, therefore, approves the above amounts for inclusion in rate base and operating expenses for purposes of establishing rates in Phases I and II. (We note that as the result of this Commission's requirement of full Staff verification of Cope facility plant related expenditures included in this Order prior to Phase I rates being placed into effect, that Staff has now completed said verification. We also hold that Staff shall fully verify Cope facility plant related expenditures included in this Order prior to Phase II rates being put into effect.)

2.

**Cope Plant - Inventory**

The Company has proposed that it be allowed to include \$7,612,874 in rate base representing \$4,993,750 in coal inventory and \$2,619,124 in other materials and supplies inventory. The Staff has included a similar adjustment in their report. No other party contested the amounts or the manner in which they were determined. The Commission recognizes that it is appropriate to provide for inventory balances at the Cope Plant and finds that the amounts the Company is proposing are reasonable. Therefore, the Commission approves this adjustment.

3.

**Cope Plant - Property Taxes**

The Cope Plant will not begin commercial operation until 1996 and property taxes will not be expensed until January 1997.

Accordingly, the Company has requested that Phase II of the rate increase include an accrual for property taxes in the amount of \$6,371,314. This amount was determined based on the total construction costs of the plant of \$436,087,487 and the applicable current millage for Orangeburg County. Both Company and Staff propose an adjustment of \$6,371,314.

Dr. Ruoff contended that the millage used in calculating the property taxes will likely decrease because of the substantial addition to the property tax base that the Cope Plant represents. He cited, as an example, the reduction in millage in Fairfield County at the time V.C. Summer Station was placed into service. Company witness Addison responded that the Company has used the most recent known millage in Orangeburg County and has no basis for anticipating what if any changes in millage might occur once the Cope Plant is added to the property tax base. He further testified that the reduction in millage in Fairfield County was temporary. In subsequent years, the millage in that County increased above what it had been prior to Summer Station beginning commercial operation. (Tr. Vol. 3, p. 310-318).

The Commission finds that property taxes for the Cope Plant will indeed be expensed once it is placed in operation. The use of the current Orangeburg County millage rate is appropriate to measure the expected amount of these taxes. The Commission finds that the evidence addressed by Dr. Ruoff does not establish a credible basis to assume that a lower millage rate will be expensed. Accordingly, the Commission accepts the Company's

calculation of future property taxes on the Cope Plant for inclusion in Phase II rates, and approves the Company and Staff adjustment.

4.

**Cope Plant - Accumulated Deferred Income Taxes (ADIT)**

Staff originally proposed a reduction to retail rate base of \$1,119,000 in Phase I and \$6,440,000 in Phase II for the effect on ADIT of the tax depreciation associated with the Cope Plant. Company witness McClellan pointed out in his rebuttal testimony that the Staff's position results in a possible violation of the Internal Revenue Service Code for which the penalty can be that the Company is prohibited from using accelerated depreciation for tax purposes. Loss of accelerated depreciation would greatly increase costs to SCE&G's customers. The Company and Staff were unaware of these possible consequences until Mr. McClellan filed his rebuttal testimony. In response to Mr. McClellan's assertion, the Staff revised its recommendation to eliminate the adjustment to Phase I and reduce retail rate base in Phase II by \$1,119,000. Mr. McClellan agrees that the Staff's revised position is acceptable and does not constitute a possible violation of the Tax Code. The Commission finds that the revised adjustment to ADIT proposed by the Staff is appropriate, and adopts same. (Accordingly, the Staff request that the Company obtain a private letter ruling from the I.R.S. is moot.)

5.

**Cope Plant - Depreciation Reserves**

The Company proposed to increase the balance in the accumulated reserve for depreciation by one-half of the effect of the annual depreciation expense. In Phases I and II, this results in an increase to depreciation reserves of \$6,633,640 and \$6,868,378, respectively.

The Staff and the Department of the Navy contend that the adjustment should reflect a full year of depreciation expense, based on past Commission practice (Vol. 4, p. 21-22 and p. 489).

Company Witness Mr. McClellan asserted that if actual year-end plant is used in the determination of rate base, depreciation expense must be annualized, and the year-end level of depreciation reserves should be maintained. An adjustment to historic test year investment to deduct prospective depreciation accumulations is a misdirected effort to maintain a consistent balance of invested capital and recovered capital. He contended that such an adjustment is wrong because the recorded period-end depreciation reserve is the proper amount to use with a period-end rate base. If the depreciation reserve is carried into the future, it becomes an isolated prospective adjustment that distorts the investment/operating results relationship. In addition, the recovery of the investment in plant facilities through depreciation expense that will occur in the months following the test period will be offset by the same or more funds being invested in additional plant facilities in those same months. Accordingly, Mr.

McClellan concluded that an adjustment to depreciation reserves for future changes without a comparable adjustment for prospective additions to plant results in an understatement of the prospective investment. Mr. McClellan also stated that the Company's adjustment, while an attempt at compromising the positions of taking the full effect of the depreciation expense or none of it, is also not appropriate. (Tr. Vol. 4, p. 159-165).

We hold that our past practice to adjust depreciation reserves by the full amount of changes in depreciation expense is appropriate in this case also. Therefore, we approve an adjustment of \$19,343,000, relating to annualization of retail depreciation expense.

We also believe that Staff's other adjustments to accumulated depreciation reserve are appropriate and should be approved: an increase in the reserve by the full amount of increase in amortization expense due to faulty steam generators in the amount of (\$1,682,000); an offset by the full amount of decrease in depreciation expense due to changes in depreciation rates in the amount of \$1,197,000; for Cope Plant, Phase I and II, offsets by the full amount of increases to depreciation expense in the amounts of (\$12,587,000) and (\$445,000) respectively. For the depreciation reserve shift the appropriate offset is (\$369). The offset adjustments were concurred in by the Consumer Advocate and the Navy.

6.

**Edison Electric Institute (EEI) Dues**

The Staff, Consumer Advocate and Navy proposed various adjustments to reduce the amount of EEI dues contained in test year operating expenses based on the report of EEI financial operations issued by the NARUC Oversight Committee. After due consideration of all the evidence and proposals in the matter, we believe that Staff's proposed reduction to South Carolina Retail of \$41,000 is most appropriate. Staff has properly screened the various categories of EEI dues and determined an appropriate reduction to expenses for what we consider to be the non-allowable portion.

7.

**Employee Clubs**

The Staff, Consumer Advocate and Navy have proposed various adjustments to remove from consideration in rates the operating expenses, depreciation expenses and rate base components of the Company's Employee Clubs (Pine Island, Sand Dunes and Misty Lake). These adjustments were made to conform with past Commission practice.

Despite the request from the Company that we reconsider our position in this matter, we believe that it is still appropriate to remove from consideration in rates all expenses of the various Employee Clubs, since we do not believe that the Clubs are necessary for the provision of utility service. The Staff, the Navy, and the Consumer Advocate all proposed similar adjustments to expenses but we adopt a reduction of \$332,000 from expenses and a



reduction of \$1,505,000 from rate base for investment related to employee club facilities.

8.

**Injuries and Damages**

Consumer Advocate Witness Mr. Miller has proposed an adjustment to reduce injuries and damages expense included in test year operating expenses based on a comparison to the average of such expenses over the five calendar years preceding the test year. Mr. Miller recommends a reduction of \$477,374. No other party recommended such an adjustment.

Company witness Addison responded that the primary reason that the five-year average is less than the test year amount is that the year 1992 is abnormally low. As is shown in the following schedule of injuries and damages expense for the eight calendar years preceding the test year, 1992 is considerably less than any other year.

1987	\$6,073,887
1988	4,899,688
1989	5,312,861
1990	5,425,357
1991	4,940,089
1992	2,989,867
1993	4,189,079
1994	4,391,399

The Commission finds that an average of the expense over these eight years which ignores the abnormally low amount in 1992 and the abnormally high amount in 1987 results in a more valid comparison to the test year. This calculation yields an average expense of \$4,859,745 which is only slightly less than the test year amount of

\$4,881,949. Therefore, the test year amount is a reasonable level of injuries and damages expense to recover through rates and should not be adjusted. We reject the Consumer Advocate's adjustment.

9.

**Uncollectibles**

The Navy contended that the uncollectible expense included in the test year is overstated because of an unusual or non-recurring event. The Navy recommended averaging the portion of the uncollectible expense identified as "all other" for the four years prior to the test year which do not contain this event. This calculation results in a reduction to uncollectible expense of \$525,058. The Company's Witness Mr. Addison agrees that the uncollectible expense has been affected by an unusual event and that a reduction is appropriate. (Tr. Vol. 4, p. 15-16).

The Commission finds that the adjustment proposed by the Navy results in a more reasonable level of uncollectible expense based on prior years. Accordingly, the adjustment is approved.

10.

**Demand-Side Management (DSM) Programs**

The Company has proposed to discontinue the method of deferral and cost recovery related to its DSM programs established by the Commission in Docket No. 92-619-E and to amortize the balance in the deferred asset account, including accumulated carrying costs, over three years. This results in the Company request that it be allowed to include in rates \$3,958,165 in DSM expenses and an annual amortization expense of \$847,668.

Consumer Advocate's Witness Mr. Miller stated that the amortization period should be five years as the Company has proposed for the deferred environmental costs and the Parr and Hagood costs. In this manner, the effect on the revenue requirement of the amortization of the three items is lessened and the combined effect does not significantly impact rates. This proposal results in an annual amortization expense of \$508,601. All parties to the Stipulation agreed to a five-year amortization.

The Staff has indicated that since the balance in the deferred asset account will continue to accumulate through December 1995, it would be appropriate to amortize the amount over an additional period at the approved level until the deferred account is exhausted.

The Commission agrees that the level of amortization resulting from using a five-year amortization period is reasonable. Accordingly, the Commission approves annual amortization expenses of \$508,601 to be applied for the period necessary to extinguish the deferred asset balance that exists at December 31, 1995. The Commission further finds that discontinuation of the DSM deferral and cost recovery mechanism is appropriate and that DSM expenses in the amount of \$3,958,165 should be included in rates.

11.

#### **Materials and Supplies Inventory**

Consumer Advocate's Witness Mr. Miller contended that coal inventory included in rate base is over-stated because the volume of coal is considerably greater at March 1995 than at the end of

any other month during the test year. Accordingly, Mr. Miller recommends that the Company's rate base be reduced by \$8,424,637 based on the average inventory level during the test year.

Navy's Witness Mr. Smith also takes the position that it is more appropriate and more representative of normal experiences to utilize an average balance for determining the inventory amount to be included in rate base. Mr. Smith considers fossil fuel as well as other materials and supplies in his proposed adjustment. Based on the balances in these inventory components at the end of each month in the test year, Mr. Smith recommends that rate base be reduced by \$7,813,137. (Tr. Vol. 4, p. 336).

The Commission believes that averaging inventory balances over the test year produces an amount to be included in rate base that is more reflective of the Company's normal, ongoing inventory levels. The Commission further believes that it is appropriate to treat all components of inventory in this manner, including fossil fuel and other materials and supplies. Therefore, the Commission adopts the Navy's adjustment.

## 12.

### Construction Work in Progress (CWIP)

The Consumer Advocate's Witness Mr. Miller argues that CWIP with completion dates in 1996 and beyond should not be included in rate base. To accomplish this, he proposed a reduction in rate base of \$34,916,804.

As Company Witness Mr. Addison testified, the construction projects in question were necessary to meeting increasing demands

for service, to ensure high levels of productivity and efficiency, and to comply with environmental regulations. (Tr. Vol. 4, p. 67). As Mr. Addison further testified, it is in the best interest of the ratepayers to recognize CWIP related to these projects because if the projects are not included in rate base, the Company will continue to accrue AFUDC and ultimately drive up the cost to be included in rate base. (Tr. Vol. 3, p. 275).

The Commission finds that its practice of including CWIP in rate base is appropriate and provides a ratepayer benefit in terms of reduced rate base in the future. Accordingly, the Commission denies the Consumer Advocate's adjustment. The Commission also agrees with the Staff adjustments to close CWIP to plant accounts of (\$53,857,000), and to include completed CWIP projects in plant in service of \$34,423,000.

13.

**Acquisition Adjustment - Urquhart Turbine**

The Company has included in rate base \$1,044,768 for the acquisition adjustment associated with the purchase from Duke Power Company of an internal combustion turbine adjacent to the Company's Urquhart Generating Station. The Company also proposed to include \$94,979 in operating expenses for amortization of the acquisition adjustment over an eleven (11) year period consistent with the estimated remaining useful lives of the other internal combustion turbines located at Urquhart Station. The Commission approved the acquisition adjustment for inclusion in rate base in Docket No. 94-390-E. (Tr. Vol. 3, p. 239).

The Consumer Advocate questioned the prudence of the purchase of the turbine. He argued that the turbine is not likely to be used and useful for the eleven years that the Company has indicated as its remaining life and that it is not economical to operate. (Tr. Vol. 3, p. 280-288).

The Commission finds the testimony of Mr. Addison on this point to be persuasive. He testified that, in the context of its use as a peaking facility, the Urquhart turbine is a good value. Furthermore, based on examinations conducted on the other turbines owned by the Company at Urquhart as part of the depreciation study submitted in this proceeding, eleven years is a reasonable remaining life. (Tr. Vol. 4, p. 51-57).

The Commission believes that the Company's position is correct and that the Urquhart turbine is a proper addition to rate base. The Commission also approves the amount of the amortization of the acquisition adjustment and its inclusion in expenses recoverable through rates. However, the Commission adopts Staff's adjustment of (\$90,000), which offsets Urquhart amortization reserve in rate base by the full amount of the amortization expense adjustment.

14.

**Other Post-Employment Benefits (OPEB)**

The Company initially presented a separate adjustment to test year operating expenses for the change in OPEB expense resulting from the most recent actuarial estimates. The adjustment resulted in an increase to operating expenses of \$359,718. Subsequently, in the Supplemental Testimony of the Company's Witness Mr. Addison,

the Company proposed to include all OPEB expenses in its cost-recovery mechanism for compensation-related items. Mr. Addison agreed to eliminate the separate adjustment for OPEB expenses. (Tr. Vol. 4, p. 7).

The Commission finds that elimination of the separate adjustment is proper.

15.

**Steam Generators**

The Company proposed that the unrecovered investment and costs of removal related to the recently replaced steam generators at V. C. Summer Nuclear Station be transferred from utility plant accounts to a deferred asset account, specifically Account 182.2 - Unrecovered Plant and Regulatory Study Costs, and amortized over the remaining life of the nuclear plant. This treatment is consistent with that granted by the Commission for accounting purposes in a letter to the Company dated March 29, 1995. The proposal results in \$47,139,313 being included in the deferred asset account and an annual amortization expense of \$1,773,266. The Staff has reflected the annual amortization in their report.

Consumer Advocate Witness Mr. Miller has objected to this adjustment on the basis of his not knowing the terms of the Company's settlement with Westinghouse. The Westinghouse settlement has been sealed by Order of the Federal District Court for the District of South Carolina. It has been made available for review by the Staff of the Commission.

The Commission approves the annualization proposed by the

Staff to place the unrecovered investment and costs of removal related to the replaced steam generators in a deferred asset account and to amortize the balance over the remaining life of the nuclear plant (27.5 years).

16.

**Allowance for Funds Used During Construction (AFUDC)**

The Staff recommended that rate base be reduced by \$41,000 for the over-accrual of AFUDC included in CWIP. The over-accrual results from a timing problem and was corrected by the Company outside of the test year. The Commission approves this adjustment.

17.

**New Depreciation Rates**

The Company has asked for approval of new depreciation rates based on a recently completed depreciation study. The new depreciation rates reflect the effect of the proposed shift in depreciation reserves from the Company's transmission and distribution assets to its nuclear production assets.

The Commission finds that the new depreciation rates proposed by the Company are appropriate and authorizes the Company to implement them.

18.

**Cash Working Capital**

The Commission Staff and Company had calculated the Company's cash working capital requirement based on the formula method used by this Commission in all recent electric rate proceedings. The Consumer Advocate has recommended that the Commission include a



zero cash working capital allowance, based on the failure of the Company to compute an alternative cash working capital allowance based on a lead-lag study.

In this case, the Company computed its cash working capital requirements using the one-eighth formula. This one-eighth formula is a standard formula used in utility regulation to calculate the amount of cash utilities must have on hand to support working capital requirements. The Consumer Advocate's Witness Mr. Miller argues that the cash working capital allowance should be based upon the results of a lead-lag study. A lead-lag study attempts to quantify cash working capital requirements by studying the delay between the date the utility service is rendered, and the date payment is received; and the delay between the utility's receipt of bills or expenses, and the payment of those bills by the utility.

The one-eighth formula is the prevailing method used by regulators nation-wide to measure cash working capital requirements. (Tr. Vol. 5, p. 42) In Order No. 89-588, entered in Docket No. 88-681-E, the Commission noted that SCE&G's lead-lag study performed in that docket did not provide a better approximation of cash working capital needs than the one-eighth formula.

The Commission agrees with the position advanced by the Company and Staff that the one-eighth formula is a proper means to determine cash working capital. One reason is practicality. The lead-lag study is extremely complex and expensive. A utility company, like SCE&G, generates millions of bills for services each

year and pays thousands of bills from suppliers. The Company's Witness Mr. Addison testified that performing a lead-lag study is a complicated, time-consuming and expensive process. If the Commission were to order lead-lag studies, SCE&G's customers would ultimately pay the cost of them. Moreover, despite their expense, these studies are rarely conclusive. The outcome of the studies is very much dependent on the assumptions used in labeling and tracking expenditures and are routinely contested as inaccurate or biased.

The Commission sees no need to deviate from its established policy of relying on the one-eighth formula. The Commission finds that the one-eighth formula properly estimates cash working capital for South Carolina Electric & Gas Company in this proceeding.

19.

**Prepayments**

The Company used an end-of-test-year balance of \$11,966,000 for prepayments. In previous electric rate cases, the Commission has accepted the end-of-test-year balance approach. Department of the Navy's Witness Mr. Smith proposes to use a 13-month average in determining the prepayments balance which would reduce prepayments by \$1,487,342, and a further reduction of \$109,838 to adjust for the over-weighting of the month of March in the 13-month average computation. The Commission finds that the end-of-test-year balance approach is appropriate in this case, and sees no need to deviate from previous decisions.

20.

#### Customer Growth

The Company's Witness Mr. McClellan testified that in a test year, consisting of 12 consecutive months of operations, it is expected that there will be an increase in the number of customers being served. Since the rate base serving these customers is based upon the capital invested at the end of the period, it is appropriate to "grow" the customer base to match the year end investment data. This is typically developed from the relationship of the number of customers over the 12 months of the test period. The resulting growth factor is then applied to the operating income for the 12 months as a "roll forward" of customers being served (i.e., as though the customers at the end of the 12 month period had been on line over the entire period).

The Commission Staff updated the end of the period customers contained in the customer growth formula to reflect customers as of July 31, 1995, which is four months beyond the end of the test year. Staff Witness Mr. Ellison supports the extenuation by the fact that other adjustments were made outside of the test year. Company Witness Mr. McClellan disagreed with the Staff's approach, because it does not appear consistent to apply an income growth factor apart from a comparable investment growth factor. Company Witness Mr. McClellan testified that when a post-test year program investment or expense adjustment is made, the normal reason is that the related costs will be in place and must be recovered under test year levels of operations and the supporting investment. Also, as

Company Witness Mr. McClellan testified, conversely, adjustments related to growth in operating conditions normally require that all aspects of the increased level of operations, including the facilities supporting operations, be considered.

Simply put, it is not appropriate to adjust revenue to reflect customer growth without also adjusting expenses to reflect growth spending to serve customers. The Commission agrees with the Company and adopts its calculation of customer growth.

21.

#### Officer Salary Increases

South Carolina Electric & Gas Company provided its officers with salary increases during the test year. These increases were based on a comparison of the salary level for SCE&G's officers with a comparator group of similar regulated utilities adjusted for differences in size of companies. (Tr. Vol. 5, p. 21-32). This comparison indicates that SCE&G's officer salaries, even with the increases in question, are significantly below industry standards (Tr. Vol. 5, p. 21-32). Accordingly, the salaries, including the increases, represent reasonable and necessary expenses of operating the utility system and providing service to customers, and are properly recoverable in rates. The Commission approves the inclusion of officer salary increases in test year expenses.

22.

#### Officer Incentives

The Company also provides incentives to SCE&G's officers. These incentives are based either on long or short term performance

of the Company.

As set forth in the testimony of the Company's Witness Mr. Edward Delahanty, even assuming 100% pay-out of these officer incentives, the officers of SCE&G are under-compensated by utility industry standards by approximately 23%. This is in addition to the fact that utility industry executives are compensated at levels dramatically less than those of executives of comparably sized non-regulated companies.

As testified to by Mr. Delahanty, the long and short term officer incentives are an integral part of the executive compensation package for the Company. Absent these incentives, it would be impossible for the Company to attract and retain qualified executives to run the Company.

These incentives are properly considered to be an at risk portion of what is, in total, a reasonable compensation package. Accordingly, they are valid utility operating expenses and are included in test year expenses.

23.

#### **Environmental Costs**

Both the Consumer Advocate and the Company propose changing the amortization of all Vintage II environmental costs from ten (10) years to five (5) years. The Navy proposes to exclude carrying costs and amortize over the remaining 89 month period. The Staff proposes to leave the ten year amortization period in effect. The Consumer Advocate and the Company propose an adjustment of \$717,000, the Navy an adjustment of \$144,758, and the

Staff an adjustment of \$323,000. The Consumer Advocate, the Company and the Staff also propose to include carrying charges on environmental costs in rate base. The Consumer Advocate and the Company propose an adjustment of \$198,000, and the Staff proposes an adjustment of \$101,000.

We adopt the Consumer Advocate's and the Company's position and adjustment on both the amortization and the rate base treatment. We think that shortening the amortization period is an appropriate accounting treatment, as is the Consumer Advocate's accompanying rate base adjustment. This is also consistent with the Stipulation adopted herein.

24.

**Parr and Hagood**

Likewise, the Stipulation adopted by us calls for a change in the amortization of Parr and Hagood Demolition costs from 10 years to 5 years. An adjustment of \$183,000 is therefore appropriate as is an inclusion of the unamortized lease termination payment in rate base (an adjustment of \$467,000) and the inclusion of this payment in the Parr and Hagood amortization.

25.

**Nonallowables**

The Staff, Consumer Advocate, and Navy all propose removal of various nonallowables from cost of service, such as employee newsletters, social club memberships, employee awards, Company sponsorships of sports teams, events, and recreational activities, and other miscellaneous nonallowable items. (The Staff and Navy

propose removal of only one-half of Chamber of Commerce dues.) Although most of the parties propose similar adjustments to these items, we believe the adoption of Staff's adjustments for these items is appropriate, including the removal of only one-half of Chamber of Commerce dues. We believe that the Chamber of Commerce is an organization that is useful for recruiting industry into South Carolina, which ultimately inures to the benefit of the ratepayers of South Carolina.

26.

#### **Emission Allowances and Fee Refund**

Both Staff and Company propose inclusion of emission allowances adjusted for known and measurable changes in rate base. We adopt Staff's adjustment of \$5,785,000 as being the most accurate. We also believe that Staff's proposal to reduce expenses to amortize the air emission fee refund over 5 years, and a reduction in rate base by the unamortized air emission fee refund is appropriate. We therefore approve adjustments of (\$48,000) and (\$195,000) respectively.

27.

#### **Interest Synchronization**

We approve Staff's proposed interest synchronization adjustment to income taxes, based on capital structure, embedded cost rates, and the rate base approved herein, supra.

28.

#### **Unclaimed Funds**

The Company, Staff, and Consumer Advocate all propose reducing

rate base for unclaimed funds. Although the proposed adjustments are similar, we adopt Staff's adjustment of (\$126,000).

29.

#### Property Transfer

Staff proposes reducing income taxes to share benefits of transferring property to the Town of Mount Pleasant, and a corresponding reduction in rate base. The adjustments proposed are (\$14,000) and (\$14,000) respectively. These adjustments are in concert with sound regulatory accounting principles, and we therefore approve them.

30.

#### Advertising

The Consumer Advocate proposed removing Account 930.1 as being goodwill and institutional-type advertising. Upon examination of the evidence we agree, and, adopt the Consumer Advocate's adjustment of (\$25,642).

31.

#### Property Under Docket No. 89-230-E/G

Rather than approve any particular adjustment for handling gains or losses on property under Docket No. 89-230-E/G, we hereby instruct Staff to continue to monitor land activities until such time as the monetary amounts involved become, in the opinion of Staff, significant. At that time, Staff shall report to the Commission.



32.

**All Other Adjustments**

The Commission holds that all other accounting and pro forma adjustments proposed by the Staff, and not objected to by the other parties, are approved. Further, all other adjustments proposed by any other parties, which are not specifically addressed herein, have been considered by the Commission and are denied.

Further, we adopt Staff's \$4,000 adjustment to annualize interest on customer deposits, and Staff's proposal to increase rate base to update the factor used for allocating customer deposits to electric operations, an adjustment of \$101,000.

D.

**Evidence and Conclusions for Finding of Fact No. 12**

Since the close of the test year, the Company has continued its aggressive program of cost control by continuing to reduce staffing levels. As Company Witnesses Messrs. Kenyon and Timmerman testified, the Company continues to invest heavily in infrastructure and technology to meet customer growth and improve customer service. Its cost control efforts in general, and its staffing reductions in particular, are part of its long term strategy to off-set the upward pressure on rates that this required capital spending program represents.

Off-setting the savings from staff reductions are the cost increases associated with severance pay and early retirement programs. These cost increases have been deferred and are being amortized over approximately 8 years. In addition, the Company has

other significant expenses related to the provision of employee benefits, including pensions, other post-employment benefits (OPEB) and long-term disability. A component of the OPEB expense is the amortization of the transition obligation which represents the accumulated obligation associated primarily with the cost of health care benefits for retirees. The transition obligation came into being at the time the accounting rules regarding the recognition of retiree health care costs changed. It is being amortized over 20 years per Commission Order 93-465 dated June 7, 1993.

The Company is proposing that a level of expense in the amount of \$20,902,849 be established that encompasses all of the costs and savings discussed above. The Company would vary the amortization periods related to early retirement benefits, severance and the OPEB transition obligation such that changes in the other components would be exactly off-set. In this manner the Company has a mechanism for managing the costs and savings of future staff reductions, as well as changes in the costs of pensions, OPEB and long-term disability, that enables it to maintain the level of expense reflected in rates. Under this mechanism, what would otherwise be a net increase in total cost for these items would be off-set by extending the relevant amortization periods to off-set the increase. A net decrease would result in a shortening of the amortization periods.

The Commission finds that the Company's proposal is a just and reasonable means to allow the Company to manage changes in various

aspects of its total employment cost package.

As with the regulatory assets discussed above, no one disputes that the Company has the right to recover the costs represented by the employment related assets at issue here. Further, as is the case with the nuclear assets discussed below, setting the recovery period involves a balancing of interests between the Company and its customers. On the customers' side of the balance is their interest in mitigating the rate impact of the recovery by spreading it over a longer period. On the Company's side of the balance is the Company's interest in assurance of recovery and timeliness of recovery.

The Company's proposal properly balances these considerations by setting a fixed level of rate impact (\$20.9 million for the total package) and allowing the relevant amortization periods to float so that this level of rate impact is never exceeded. The Commission finds that this is an appropriate means of balancing the interest of customers and the Company.

In addition, the Company and other parties propose various OPEB, pension, retirement, workforce reduction, and severance pay adjustments. The adjustments proposed are similar in most categories. We agree with and adopt an adjustment to OPEB expense of (\$789,000) to reflect the latest actuarial valuation, a reduction of (\$3,872,000) to pension expense for known and measurable changes, a reduction in expenses of (\$8,054,000) due to workforce reductions, a reduction in expenses for severance pay booked during the test year of (\$1,160,000), an adjustment of

\$1,564,000 for amortization of severance pay, an adjustment of \$6,569,000 for amortization of total early retirement benefits, and an adjustment of \$1,081,000 to recognize additional OPEB expense due to early retirements. These adjustments reflect appropriate regulatory accounting principles in this case. In addition, the Company proposed to offset the decrease to pension expense by increasing amortization of the OPEB transition obligation, by proposing an adjustment of \$4,661,000. We believe that this is proper, and adopt said adjustment.

E.

Evidence and Conclusions for Findings of Fact No. 13

Pursuant to S.C. Code Ann., Section 58-27-180 (1976), the Commission has the authority after hearing to "ascertain and fix" the value of the property of an electric utility. In the context of a ratemaking proceeding, such authority is exercised in the determination of the electric utility's rate base.

For ratemaking purposes, the rate base is the total net value of the electric utility's tangible and intangible capital or property value on which the utility is entitled to earn a fair and reasonable rate of return. The rate base, as allocated or assigned directly to SCE&G's retail electric operations, is composed of the value of SCE&G's property used and useful in providing retail electric service to the public, plus net nuclear fuel, construction work in progress, materials and supplies, and allowance for cash working capital. The rate base computation incorporates reductions for the reserve for depreciation and amortization, accumulated

deferred income tax and customer deposits. In accordance with its standard practice, the Accounting Department of the Commission Staff conducted an audit and examination of SCE&G's books, and verified all account balances from SCE&G's General Ledger, including rate base items, with plant additions and retirements. On the basis of this audit, pertinent hearing exhibits, and testimony contained in the record of the hearing, the Commission can determine and find proper balances for the components of SCE&G's rate base, as well as the propriety of related accounting adjustments.

For ratemaking purposes, the Commission has traditionally determined the appropriate rate base at the end of the test period. This Commission's practice of determining a utility's rate base on a "year end" basis serves to enhance the timeliness of the effect of such action, and preserves the reliance on historic and verifiable accounts without resort to speculative or projected figures. Consequently, the Commission finds it most reasonable to continue to adhere to this regulatory practice and evaluate the issues of this proceeding using a rate base for SCE&G's retail electric operations as of March 31, 1995.

When the rate base has been established, SCE&G's total operating income for return is applied to the rate base to determine what adjustments, if any, to the present rate structure are necessary to generate earnings sufficient to produce a fair rate of return. The rate base should reflect the actual investment made by investors in SCE&G's property and the value upon which

stockholders will receive a return on their investment.

With respect to the record in the instant proceeding, only certain rate base issues were contested by the parties of record. Those issues related to plant in service and construction projects, and to the methodology for computation of working capital and are each discussed separately herein. The Commission hereby adopts the following as the Company's rate base:

**TABLE B**  
**ORIGINAL COST RATE BASE**  
**RETAIL ELECTRIC**  
**MARCH 31, 1995**  
**(000'S)**

	<u>After Phase I</u>	<u>After Phase II</u>
Gross Plant in Service	\$3,619,044	\$3,633,184
Net Plant in Service	(1,025,280)	(1,025,725)
Accumulated Depreciation	\$2,593,764	\$2,607,459
CWIP	130,381	130,381
Accumulated Deferred Income Taxes	(399,840)	(400,959)
Materials & Supplies Inventory	136,758	136,758
Cash Working Capital Allowance	21,333	21,333
Total Original Cost Rate Base	<u>\$2,482,396</u>	<u>\$2,494,972</u>

F.

**Evidence and Conclusions for Finding of Fact No. 14**

The Company proposed a capital structure consisting of 50.58% long-term debt, 3.04% preferred stock, and 46.38% common equity. This was the capital structure as of March 31, 1995. The Company filed revised exhibits with a capital structure consisting of 48.97% long-term debt, 2.76% preferred stock, and 48.27% common equity. This updated capital structure was based on September 30, 1995. The Department of Consumer Affairs, The Department of the

Navy, the South Carolina Energy Users Committee, SCE&G and John C. Ruoff have entered into a stipulation that the proper capitalization for determining SCE&G's rates and charges shall be the capitalization of September 30, 1995 set forth in the updated capital structure filed on October 19, 1995 as revised Exhibit D-VII.

The Commission Staff utilized the capital structure and embedded cost rates for long-term debt and preferred stock as of September 30, 1995. The Commission adopts this capital structure for purposes of calculating the weighted average cost of capital in this proceeding.

G.

Evidence and Conclusions for Finding of Fact No. 15

There is no dispute among the parties that SCE&G's cost of long-term debt is 7.34% and its cost of preferred stock is 7.67%. The capitalization and embedded cost rates are as of September 30, 1995. The Commission, therefore, adopts a cost rate of 7.34% for long-term debt and a cost rate of 7.67% for preferred stock in this proceeding.

H.

Evidence and Conclusions for Finding of Fact No. 16

1.

**Return on Common Equity**

The most controversial cost of capital issue is the return on common equity. On this issue, the Commission heard the expert testimony of 4 witnesses. Mr. Charles Benore, President of Benore

Financial Consulting, testified on behalf of South Carolina Electric & Gas Company. Mr. Charles Schreiber, Managing Director of the Utility Finance Division of Paine-Webber, Inc., also testified for the Company. Dr. James E. Spearman, the Assistant Public Utilities Economist for the Commission Staff, appeared on behalf of the Staff. Dr. John B. Legler, Professor of Banking and Finance of the University of Georgia, appeared on behalf of the Department of the Navy.

In his prefiled testimony, Mr. Benore recommended that the Company be authorized to earn an equity return of 12.0% to 13.0%. His point recommendation was 12.5%, which included a factor for the recovery of common equity flotation costs. At the time of his appearance, Mr. Benore updated his estimates and reduced his best point estimate of the cost of common stock from 12.5% to 12.25%.

All three cost of equity witnesses recommend the adoption of a flotation cost adjustment in this case. The only difference is in the magnitude of the required adjustment. Mr. Benore recommends the adoption of a 20 basis point adjustment (Tr. Vol. 2, p. 72). Dr. Spearman recommends the adoption of a 11 basis point adjustment (Tr. Vol. 4, Spearman, p. 564). Dr. Legler recommends the adoption of a 15 basis point adjustment (Tr. Vol. 3, Legler, p. 218).

In arriving at a fair return on equity, the Commission applies the principal set forth in Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 602-603 (1944); and Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679, 692-73 (1923), as adopted by the South



Carolina Supreme Court in Southern Bell Telephone and Telegraph Company vs. South Carolina Public Service Commission, 270 S.C. 590, 244 S.E.2d 278 (1978). These cases provide that a fair rate of return for a utility must be one that is commensurate with returns on investments for other enterprises with similar risks which is adequate to ensure the confidence of financial markets; and which is adequate to allow the Company to maintain its credit worthiness and to allow it to attract new capital at reasonable terms. Id.

In assessing what constitutes a fair rate of return, certain financial models and methods of analysis are used to measure expected costs of capital. Each of these models has its strengths and weaknesses. By law, the Commission is not required to use any single formula or combination of formulas in calculating costs of capital. Id.

Furthermore, there is a difference between cost of capital which is measured by these formulas and a fair rate of return. The decision as to what constitutes a fair rate of return involves a balancing of investor and customer interest in the exercise of expert judgment by the Commission. As a matter of regulatory policy, it is appropriate to consider the efficiency of a company in determining at what point within a general range of reasonableness its rates of return must fall. In fact, there is statutory authority under S.C. Code Ann. Section 58-27-970 (1976, as amended) which allows utilities to participate in profits arising from efficiencies they have achieved. Accordingly, the use of these formula-based analysis techniques is in all cases subject

to the expert judgment of the Commission.

The Company's first witness concerning rate of return was Mr. Schreiber. His testimony focused on the earning investors would expect to support a strong A bond rating for the Company. Mr. Schreiber noted that SCE&G has substantial capital requirements over the next five years and testified that it is essential to the provision of reliable service at reasonable rates that the Company at least maintain, if not improve, its current credit quality. (Tr. Vol. 1, p. 171). The Company should maintain debt coverage ratios in the range of 3.5 to 4.0 times earnings according to Mr. Schreiber. (Tr. Vol. 1, p. 206). Mr. Schreiber testified that to support the required 3.5 times earnings, the Company would have to have an earned return on equity of 12.25%.

Mr. Schreiber's testimony also focused on the issue of further competition in the electric industry and how it affects the opinions of investors. His exhibit GAS-11 in Hearing Exhibit 6 shows that investors have reacted negatively to the diminished earnings prospects of electric utility companies brought about by the specter of competition. He asserted that the challenges of competition must be addressed by both management and regulators if the financial viability of the electric utility industry is to be maintained. (Tr. Vol. 1, p. 215).

Mr. Schreiber pointed out that the markets have become much more aware of the changing nature of the electric industry. (Tr. Vol. 2, p. 4). Any actions by the Company to prepare for the effects of further competition are not premature; market responses

indicate that the time for preparation is now. SCE&G needs maximum financial flexibility to meet these competitive challenges according to Mr. Schreiber. (Tr. Vol. 2, p. 14).

The Commission finds Mr. Schreiber's testimony to be credible and concludes that it should be weighed along with the testimony of witnesses using other models and methods in determining a proper return on equity.

Mr. Benore presented the results of calculations made using three methods to estimate the Company's cost of equity. He used the discounted cash flow (DCF) method, the capital asset pricing model (CAPM), and the equity risk premium method.

Mr. Benore's initial analysis resulted in a recommendation that the Company be authorized to earn a return on equity in a range of 12.0% to 13.0%. Benore updated his analysis based on data available at the time of the hearing and revised his best point estimate from 12.5% to 12.25%. (Tr. Vol. 2, p. 83). The decline from 12.5% in his previous testimony reflects the drop in interest rates since his direct testimony was prepared. He noted that the latest Blue Chip Economic Forecast as well as Value Line projected higher interest rates for the future. Benore's average results for individual models were as follows:

(including issuance costs)

DCF (end result test)	12.7% to 13%
CAPM	11.9%
Equity Risk Premium	13.5%
Recommended	12% to 13%

Like Mr. Benore, Dr. Legler used a range of methods to analyze cost

of equity capital and produce average results in the following ranges: (including issuance costs)

DCF Method	8.8% to 10.62%
Risk Premium Method	9.27% to 11.00%
Capital Assets Pricing	10.03% to 11.22%
Comparable Earnings	11.5% to 12.0%
Recommended	10.5% to 11.5%

Dr. Spearman used the DCF and the CAPM. Dr. Spearman's average results are as follows:

(including issuance costs)

DCF Dividend Growth	8.61% to 9.20%
DCF Earnings Growth	10.11% to 11.17%
CAPM	9.74% to 11.38%
Recommended	11.25% to 11.75%

The differences between the experts' assessments of the Company's capital costs for equity were based on multiple assumptions they have made within each model to best reflect investor's expectations. None of the assumptions made are, per se, unreasonable and each analysis is properly weighed in analyzing a reasonable return on equity for the Company. In as much as various forms of the models are used and assumptions are made within each model, the Commission must review the adjustments and assumptions and compare them with its own expert judgment as to the earnings requirements of investors.

In this regard, while there are several factors which guide the Commission's exercise of its judgment in this case, two are particularly crucial. One is the size of the Company's construction and financing program. The financial markets must perceive appropriate regulatory treatment in order for the Company

to finance its large construction program and at reasonable costs. (Tr. Vol. 2, p. 76). The second factor is the inevitable increase in business risk because of increasing competition. Since rates are set for the future, SCE&G must be able to cope with unforeseeable events in order to insure that indispensable utility services continue without harming the financial status of the Company or the quality of life of SCE&G's customers. (Tr. Vol. 2, p. 76). Investors are becoming more cautious about investing in electric common stocks because of increasing competition. (Tr. Vol. 2, p. 26).

Based on the evidence before it, the Commission adopts a rate of return on common equity of 12.0%. This rate of return on equity falls within the range recommended by Mr. Benore and within model results calculated by Drs. Legler and Spearman.

Dr. Legler's comparable earnings analysis provided average returns on equity of 11.5% to 12.0%. Also, the return on equity for "A" rated electric companies in Dr. Spearman's DCF analysis reached up to 12.7%. Thus, the Commission finds a return on equity of 12.0% to be fair and reasonable.

## 2.

### Overall Rate of Return

The ratemaking process requires a determination of the overall rate of return which the utilities should be allowed the opportunity to earn. This Commission has utilized the following definition of rate of return in previous decisions and continues to do so in this proceeding.

For regulatory purposes, the rate of return is the amount of money earned by a regulated company over and above operating costs expressed as a percentage of the rate base. In other words, the rate of return includes interest on long-term debt, dividends on the preferred earnings on common stock and surplus. As Garfield and Lovejoy have put it, the return is that money earned from operations which is available for distribution among the various classes or contributors of money capital. In the case of common stockholders, part of their share may be retained as surplus.

Phillips, The Economics of Regulation, pages 260-261 (1969).

The amount of dollars permitted to be earned by the Company through the operation of its rate structure depends upon the jurisdictional rate base and the allowed rate of return on the rate base. Although the determination of the return on common equity provides the necessary component from which the rate of return on rate base can be derived, the overall rate of return, as set by this Commission, must be fair and reasonable.

The United States Supreme Court, in the decision of Bluefield Water Works and Improvement Company v. Public Service Commission of West Virginia, supra, delineated general guidelines for determining the fair rate of return in utility regulation. In the Bluefield decision, the Court stated:

What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable enterprises or

speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market and business generally. 262 U.S. at 692, 693.

During the following years, the Supreme Court refined those precepts and in the landmark Hope decision, supra. the Court restated its views:

We held in Federal Power Commission v. Natural Pipeline Gas Company...that the Commission was not bound to the use of any single formula or a combination of formulae in determining its rates. Its ratemaking function, moreover, involves the making of pragmatic adjustments. (cite omitted)...Under the statutory standard of just and reasonable, it is the result reached, not the method employed, which is controlling (cites omitted)...

The ratemaking process under the Act, i.e., the fixing of just and reasonable rates involves the balancing of the investor and the consumer interests. Thus, we stated in the natural gas pipeline company case, that regulation does not ensure that the business shall produce net revenues (cite omitted). With such considerations aside, the investor-interest has a legitimate concern with the financial integrity of the Company whose rates are being regulated. From the investor or company point of view, it is important that there be enough revenue not only for operating expenses, but also for the capital costs of the business. These include service on the debt and dividends on the stock. (cite omitted). By that standard, the return to the equity owner should be commensurate with returns on investments and other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital. 320 U.S. at 602, 603.

The vitality of these decisions has not been eroded as

indicated by the language of the more recent decision of the Supreme Court In Re: Permian Basin Area Rate Cases, supra. This Commission has consistently operated within the guidelines set forth in the Hope decision.

In consideration of these precedents, and utilizing the best judgment of the Commission, we hold that the Company's overall cost of capital shall be 9.60%.

I.

Evidence and Conclusions for Finding of Fact No. 17

SCE&G proposes to shift \$257 million in depreciation reserves presently booked against its transmission and distribution system to its accounts for the V. C. Summer Nuclear Station. The net effect of this proposed transfer would be to reduce the net book value of Summer Station by \$257 million, and to increase the net book value of the transmission and distribution properties by a corresponding amount. Because these shifts are off-setting, and because the Company has agreed for purposes of this proceeding not to take into account certain impacts of the shift on depreciation and on its cost of service by customer class, the shift can be accomplished without material impact on rates.

1.

**The Threat of Stranded Investment**

The Company proposes this shift to mitigate the threat of stranded investment caused by movements toward open access. The Company presented extensive testimony concerning the accelerating pace of change at the national level, and the growing political



pressures to end the regulated monopoly status of electric generation. In the testimony at hearing, none of the parties disputed these facts.

The Commission is not called on in this proceeding to determine whether deregulation of the electric generation business is or is not in the public interest. The Commission agrees with Company Witness Mr. Gressette that regulation of the electric utility industry has worked well in South Carolina. (Tr. Vol. 1, p. 41). As Mr. Gressette testified, the pressures for regulatory change are indeed concentrated in regions where regulation failed and undue costs have been loaded into electric rates. (Tr. Vol. 1, p. 41, 42). Nevertheless, it is undeniable that pressures for deregulation are mounting nationwide. The threat of deregulation and of stranded investment is quite real in the electric industry today.

## 2.

### **The Potential for Stranded Investment at SCE&G**

The next question is whether deregulation would pose a potential stranded investment problem for SCE&G. The Commission finds that it does.

As the Company's Witness Mr. Wright testified, industry observers generally agree that the electric industry in the United States faces a potentially huge stranded investment problem if deregulation takes place. (Tr. Vol. 4, p. 585). In a report dated August, 1995, Moody Investors Services, projects that deregulation would create a stranded investment problem for holders of utility

bonds on the order of \$135 billion. As the Company's Witness Mr. Benore testified, the risks associated with this potential stranded investment problem have already had a negative impact on the performance of utility stocks generally and SCANA, specifically. Mr. Benore testified without contradiction that investors are beginning to demand increased returns for investments in the electric utility industry, as evidenced by the disappointing performance of utility stocks in relation to recent market advances. (Tr. Vol. 2, p. 25-28). Unless these risks or perceived risks can be mitigated, they will increase the cost SCE&G must pay for capital and the costs customers must pay for electric service.

The Consumer Advocate's Witness Dr. Sinclair argued that SCE&G's rates are already so low in comparison to regional and national averages that stranded investment will not be an issue for the Company. (Tr. Vol. 4, p. 400). The Commission agrees that SCE&G is better positioned than a number of other companies to meet the challenge of competition. However, SCE&G's relative advantage does not mean that stranded investment is not a significant concern for SCE&G. It is textbook economics that in a competitive market prices are not set according to embedded costs, as they are under regulation, but according to the cost of adding the next increment of supply at the margin. Accordingly, a relative advantage under regulation does not necessarily mean insulation from risk in a competitive market.

The Commission recognizes that there are numerous variables involved in predicting future marginal cost for electricity in

market-based systems. Not the least of these is uncertainty as to the nature and extent of future deregulation. Internal combustion turbines today can be placed in service at costs that are a fraction of the embedded cost of SCE&G's present generation. This fact alone is adequate to support a serious concern that SCE&G would face significant stranded investment risks in a deregulated electric market.

Accordingly, the Commission finds that, SCE&G's relatively strong posture notwithstanding, stranded investment is a significant potential problem for SCE&G and concerns about it may already be having a negative impact on the perception of SCE&G in financial markets.

3.

**Generation Costs and Stranded Investment**

The next question is whether the proposal's focus on the capital cost of SCE&G's generation assets is reasonable. The Commission finds that it is.

Traditionally, utilities have operated under a set of interrelated principles collectively referred to as the "regulatory compact." Under that compact, the General Assembly, through Section 58-27-10 et seq. of the Code of Laws of South Carolina, has recognized that electric utility service is a natural monopoly. To prevent the collection of monopoly rents, the General Assembly has subjected electric utilities to cost-of-service regulation under these statutes.

In recognition of the public necessity of electric service,

utilities have also been placed under an obligation to plan for and serve all demand placed on their system by customers locating in their service territory. Furthermore, they have been expected to do so on a least-cost basis with planning horizons of 20 years or more. This has required utilities to invest in capital intensive, long-lived generating plants. Such plants, from a business sense, are much riskier than lower-cost but less long-lived and fuel efficient plants.

To meet service requirements, utilities have also been obligated to maintain sizable capacity margins. These margins have been necessary, in a monopoly system, to ensure that adequate supplies of electricity would be available regardless of extremes of weather or of unforeseen plant outages. In a competitive market, they raise the specter of oversupply and dumping of capacity.

Furthermore, to further reduce cost to customers, regulation has required utilities to recover the value of their plants over extended periods of time, in many cases over 20-35 years. As Company Witness Mr. Timmerman testified, these extremely long depreciation periods are uncommon in unregulated industries where business risks are not tempered by regulation. In the unregulated world, business risks require such investments to be recovered over a much shorter period of time.

SCE&G's customers have received substantial benefits from this regulatory compact. They have been guaranteed electric service on demand. The availability of electric service and its reliability

of supply have been assured. In reliance on this compact, SCE&G has raised billions of dollars in capital markets to invest in highly efficient plants. Rates have been moderated by spreading recovery of this multi-billion dollar investment over much longer periods of time that would be reasonable absent regulatory protection. All this has been based on the guarantee that, through regulation, SCE&G would have a monopoly franchise and the opportunity to recover its reasonable costs incurred in providing service.

If proposals to deregulate electric generation are successful, it would mean ending the regulatory compact before the cost of the plants built in compliance with compact obligations have been fully recovered. The Commission expressly rejects the position of the Consumer Advocate's Witness Dr. Sinclair that stranded investment is the result of management imprudence in this case. (Tr. Vol. 4, p. 373,374,375). As Company Witness Mr. Wright testified, all investments at issue here have been reviewed by the Commission for prudence before it was included in rate base. (Tr. Vol. 4, p. 598). All has been found to have been prudently incurred. Nothing in the record of this proceeding suggests otherwise.

4.

**Stranded Investment and Summer Station**

The next question that the Commission must decide is whether the Company's proposal constitutes a proper mechanism for addressing stranded cost issues. Specifically, the Consumer Advocate's Witness Dr. Sinclair has questioned targeting the

reserve shift on the capital cost of Summer Station.

The Commission finds that the Company's proposal to focus on Summer Station's capital cost is appropriate. Company Witness Mr. Timmerman testified that concerns in financial markets about stranded investment are largely centered on nuclear assets. (Tr. Vol. 1, p. 121). Summer Station is not only SCE&G's only nuclear asset, it is also the largest single asset of SCE&G.

Comparatively speaking, Summer Station stands out as having a capital cost above regional averages. SCE&G's net investment per kw for coal plants matches the regional averages almost identically. See Hearing Exhibit 27. Summer Station, however, was completed after the Three Mile Island incident raised the cost of nuclear construction dramatically. Accordingly, it bears a net capital cost that is higher than the regional average which includes many pre-Three Mile Island plants.

Mr. Timmerman notes that this \$257 million shift is not intended to be a final solution to SCE&G's stranded investment problem. (Tr. Vol. 1, p. 132, 133). It is instead intended as a reasonable first step which the Commission can take at this time. The Commission finds that \$257 million is in fact a reasonable first step in light of the potential magnitude of stranded investment problems and in light of the fact that \$257 million represents the actual amount by which capital investment in Summer Station exceeds regional averages.

The Commission will retain jurisdiction to review and adjust resulting valuations should circumstances show that SCE&G needs

either more or less stranded investment protection. As noted above, the transfer at issue here does not have a material effect on rates or on the relative rates of different customer classes.

5.

#### **The Company Specific Nature of Stranded Investment**

The Consumer Advocate and Dr. Ruoff moved that the Commission sever this issue from the present docket and open a generic docket to consider stranded investments. The Commission declines to do so for several reasons. First, this issue was raised in the week before the hearing after months of discovery had taken place and all the Company's direct testimony had been filed.

Second, the issue of stranded investment is very much a company-specific matter. Each of the three major investor owned utilities in South Carolina has a very different balance sheet, very different risk factors and very different magnitude of risk. There is little logic in lumping these three very different utilities together for purposes of this analysis.

Finally, SCE&G is the only one of the three major electric utilities operating in this State which is principally located in South Carolina. This Commission may wish to defer action on this issue until those companies' other regulators have acted.

6.

#### **The Importance of Timely Response**

Finally, the Consumer Advocate and Dr. Ruoff argued that it is premature to deal with stranded cost issues at this time. The Commission respectfully disagrees. First, the beneficial effects

of the proposal would be immediate. As the Company's Witness Mr. Benore testified, investors and rating agencies are actively reviewing and revising risk analysis for the industry. (Tr. Vol. 2, p. 118, 119, 120). By moving now to address stranded investment, the Commission would assure investors and rating agencies that they can expect prompt and responsible action on this issue from SCE&G's regulators. This alone would have a very significant benefit in moderating future increases in the Company's capital costs.

The Commission is also persuaded by the argument of the Company's Witness Mr. Wright that delay could be fatal to the Commission's ability to deal effectively with stranded investment. Specifically, this delay could make it impossible to ensure that all parties on whose behalf the underlying investments were incurred will pay a reasonable share of the total stranded investment charge. Were the Commission to wait until the precise nature and extent of deregulation became known, it is likely that the ability to address the stranded investment issue effectively will have been lost.

As pointed out in the cross examination of the Consumer Advocate's Witness Dr. Sinclair, this is precisely what happened to certain of the transition costs incurred in the deregulation of the natural gas industry. (Tr. Vol. 4, p. 419). In the gas industry, stranded investment issues were dealt with very late in the restructuring process. Certain customers which bore significant responsibility for stranded investment were successful in exiting



the system before they could be charged their fair share of transition cost liability.

Moreover, the Commission is well aware that the proposal to shift reserves has implications for the national debate concerning the deregulation of the electric industry. The Federal Energy Regulatory Commission has adopted a position at this stage of the process which places primary responsibility for resolving stranded investment concerns on the states. This is commendable in as much as South Carolina and other states do indeed have a significant interest in maintaining state jurisdiction over retail electric service, generally, and stranded investment recovery, specifically.

The Commission also believes that the interest of the State of South Carolina requires the Commission to demonstrate its ability to deal with stranded investment in a timely and constructive manner. If it and its sister Commissions nationwide do not assume this responsibility, a void will be created which only Federal authorities can fill. Simply put, inaction on this issue is an invitation for Federal pre-emption and a loss of local control over an industry that is critical to the welfare of this State.

7.

**The Commission's Authority to Order the Reserve Shift**

The Commission has also considered the Consumer Advocate's argument that the reserve shift is in excess of the Commission's powers. Specifically, the Consumer Advocate has argued that the shift violates principles of original cost rate making.

The Commission has carefully considered this assertion and the

authorities cited for it. It does not agree that it lacks legal authority to order this shift.

First of all, the shift does not involve the abandonment of traditional ratemaking methodologies as the Consumer Advocate suggests. The shift changes the amount of depreciation recorded for certain investments; it does not in any way change the fact that original cost less depreciation is the method used in setting rates.

Second, the Consumer Advocate's Witness Mr. Miller and Dr. Sinclair admitted that the reserve shift is a change in valuation of utility property. (Tr. Vol. 4, p. 305-308, 421, 422). Under Section 58-27-180 of the Code of Laws of South Carolina, the Commission has express statutory authority to make valuations and revaluations of utility property. No particular methodology is required in making revaluations.

Third, as a general principle of ratemaking, the Commission has authority to make "pragmatic adjustments" in reaching outcomes that are just and reasonable as the statute requires. The shift here is just such an adjustment.

8.

Conclusion as to the Reserve Shift

The Commission finds, as the Company's Witness Mr. Timmerman testified, that the reserve shift is a prudent means to prepare for uncertainties about future competition in the electric industry. (Tr. Vol. 1, p. 132, 133). The Commission has carefully weighed the benefits of delaying a decision on this issue against the risks

and cost of inaction at this time. The Commission finds that the public interest justifies action at this time. We further reject Dr. Ruoff's proposal that only \$209,587,387 be shifted due to faulty steam generators being transferred to a deferred asset account. We do not believe that this is an appropriate methodology.

J.

Evidence and Conclusions for Finding of Fact No. 18

In its application, SCE&G seeks authorization to accelerate the recovery of certain regulatory assets related to its nuclear operations and environmental cost. The nuclear assets relate to expenses incurred in past years a) for operation of V. C. Summer Station before it was placed in service, b) for efforts to repair the plant's original steam generators, and c) for the cost of successfully pursuing legal claims against the manufacturer of the steam generators. The environmental assets relate to various environmental response costs, the majority of which were incurred in clean up of third party facilities which received scrap transformers and other surplus material from the Company in the past. None of the parties has challenged the Company's right to recover the underlying amounts subject to amortization.

The Company's Witness Mr. McClellan testified that these regulatory assets represent past expenses which until now have been amortized over extended periods of time. (Tr. Vol. 4, p. 129-132). The nuclear assets have previously been amortized over the life of the plant. The reason for the amortization of these costs over

extended periods was to reduce the immediate rate impact from the collection of these costs. The choice of these relatively long periods was purely a discretionary choice. In making it, the Commission balanced the immediate rate impact to customers against the Company's interest in assurance of timely recovery of these prudently incurred expenses.

The Company's Witness Mr. Timmerman pointed out that under Financial Accounting Standard No. 71, these regulatory assets can be recognized for financial accounting only so long as cost-of-service regulation applies. (Tr. Vol. 1, p. 117). If deregulation occurs, F.A.S. 71 would require SCE&G to write the entire value of these assets off against earnings at that time. As Mr. Timmerman pointed out, such write downs could endanger the financial position of the Company at precisely the same time it was forced to respond to the challenge of unregulated markets. (Tr. Vol. 1, p. 117, 118). Furthermore, over the near term, the financial risks posed by the threat of a forced write down of these assets will place upward pressure on the Company's capital cost. These pressures will exist regardless of when and how competition may come to South Carolina.

As Mr. McClellan testified, the establishment of the original amortization period for these assets was discretionary. (Tr. Vol. 4, p. 129-132). The Commission finds that it is appropriate to exercise its discretion again in this proceeding to revise those depreciation periods downward. The Commission does so because the risks that these assets will become unrecoverable in the future has

increased. Accordingly, the balance between customers' interest in moderating rate impacts and the Company's interest in a reasonable assurance of expense recovery must be balanced. In recognition of this shift, the Commission determines that it is just and reasonable to reduce the amortization periods as requested in the Company's application.

The Commission notes that the Company has requested that the accelerated amortization (by \$1.3 million annually) of the majority of these assets --those related to nuclear operations-- not commence until July 1997. That is when the Company will have collected the last installment of the amortization of the carrying cost on the 400mw of capacity that the Commission made subject to a phase-in order in 1984 when Summer Station was added to rate base. By matching these offsetting amounts, the accelerated depreciation can be commenced without any net impact on rates. We respectfully reject the Navy's proposal to reduce expenses by \$2,197,079 to reschedule amortization of deferred return on 400mw of nuclear generating capacity to be recovered over 3.5 years. This is inconsistent with our above-stated methodology.

K.

Evidence and Conclusions for Finding of Fact No. 19

In 1989, Hurricane Hugo inflicted damages to the Company's electric system amounting to \$52,000,000. (Tr. Vol. 3, p. 123). In light of the magnitude of the Hugo losses and losses incurred by the insurance industry attributable to Hurricane Andrew in 1992, the electric transmission and distribution insurance markets have

provided limited coverage and this coverage has been expensive. (Tr. Vol., p. 137, 145).

As the evidence shows, in today's markets, insurers require deductibles of \$5,000,000 to \$10,000,000 and annual premiums of \$1,500,000 to \$2,000,000 for maximum coverage of \$10,000,000. (Tr. Vol. 3, p. 125-126, 146). As an alternative, the Company has explored the possibility of participating in a mutual insurance pool with other utility companies. But as the evidence shows this alternative is not feasible because the Company would be expected to share in risks of utilities with far greater hurricane exposure than SCE&G. (Tr. Vol. 3, p. 126, 146-147).

As a consequence of the foregoing, SCE&G self-insures its transmission and distribution facilities. (Tr. Vol. 3, p. 123). That is, the Company is at risk for such losses. (Tr. Vol. 3, p. 144). The Company proposes in this docket to set aside a storm damage reserve which would help offset the potential financial impact of a major hurricane or other catastrophic occurrence. (Tr. Vol. 1, p. 20), and (Tr. Vol. 3, p. 123, 126). The storm damage reserve as proposed also creates a mechanism for the recovery of amounts of storm-related expenditures that exceed the balance on hand in the fund at any given time. (Tr. Vol. 1, p. 22), and (Tr. Vol. 3, p. 125, 128). Specifically, the Company requests authorization to accumulate a fund of \$50,000,000 to be funded at \$10,000,000 a year over five (5) years. (Tr. Vol. 1, p. 23), and (Tr. Vol. 3, p. 126).

To assist in determining a reasonable reserve amount, the

Company commissioned the services of Marsh & McClellan, Inc. which provided an analysis of the transmission and distribution (T&D) assets of SCE&G, assessed their exposure to the damaging effects of hurricanes, and estimated the potential costs of repairs. (Tr. Vol. 3, p. 198). Witness Mr. Michael O'Sullivan presented the findings and recommendations of the consultant in this proceeding. The T&D hurricane exposure was determined by utilizing a six-step analysis: 1) analyze the distribution of outside plant investment values in South Carolina; 2) analyze the frequency and severity of hurricane activity in this state; 3) identify specific areas where significant T&D investments are exposed to hurricane activity; 4) examine historical hurricane activity in high exposure areas to determine environmental conditions which are likely to occur; 5) assess the ability of T&D equipment to withstand the damaging effects of various levels of hurricane activity; and 6) establish reconstructive costs associated with replacing T&D equipment. (Tr. Vol. 3, p. 198,199). Witness Mr. O'Sullivan recommended \$50,000,000 as being a reasonable reserve based on his analysis. (Tr. Vol. 3, p. 201).

The Consumer Advocate opposed the creation of the reserve fund through witness Mr. Allan L. Schwartz who challenged the funding principle and the analytical approach used by the Company, asserting that they were contrary to accepted actuarial and insurance regulatory practices. (Tr. Vol. 3, p. 102). Witness Mr. Schwartz testified that in his opinion, the highest projected annual loss supported by the Company data is \$2,000,000. (Tr. Vol.

3, p. 112). However, his calculation of one major hurricane every thirty (30) years ignores the fact that hurricanes do not occur on an ascertainable schedule, and his basic assumption caused him to ignore the fact that three (3) major hurricanes hit South Carolina in a seven (7) year period in the 1950s. (Tr. Vol. 3, p. 152). More significant to the Commission, however, is the fact that the Company is not attempting to apply actuarial ratemaking methodology as might an insurance company insuring, and thus spreading the risk over multiple insureds. Here the Company is simply attempting to establish a reasonable and prudent reserve fund to draw on in the event of a catastrophic occurrence.

The Commission believes that SCE&G has presented convincing evidence that South Carolina has historically had repeated encounters with Atlantic Ocean hurricanes and other extreme weather phenomena (e.g., severe ice storms, floods and tornadoes). Hurricane Hugo inflicted \$52,000,000 in damage to SCE&G at a time when the T&D system of the Company was valued at \$500,000,000. Today, the T&D system of the Company is valued at \$900,000,000.

Further, the Commission accepts the testimony of Mr. O'Sullivan that the T&D losses associated with one Class 2 to Class 4 storm could range from \$6,000,000 to \$102,000,000, and damage from a class 5 storm could exceed \$125,000,000. (Tr. Vol. 2, p. 200). The evidence shows that the \$50,000,000 requested represents estimated damages from a single moderate hurricane and reflects only about half of the cost that Hurricane Hugo would inflict if it were to make landfall on the most vulnerable part of the Company's



service area today.

In addition, because of the limited coverage, substantial deductible, and high premiums, referred to above, the Commission finds that there is not an economically viable commercial insurance option available to the Company to protect against losses to its T&D system. Moreover, if the Company were able to purchase insurance, the cost would be passed directly to customers. The premiums would be treated as operating expenses for regulatory purposes.

While the Company would be entitled to recover in rates for catastrophic storm damages which might be sustained, such recovery would be imposed on ratepayers at a time when they themselves would also be recovering from the effects of such a storm. The Commission believes that it is appropriate to mitigate this economic consequence by the creation of the proposed reserve fund. For these reasons, the Commission finds that the Company's proposal is reasonable and prudent and that the Company should be allowed to establish a Storm Damage Reserve Fund of \$50,000,000. However, we hold that the fund should be collected at the rate of \$5,000,000 per year over a ten year period as proposed by the Navy. This increase in the collection period will reduce the immediate impact on the ratepayers of the Company.

The Commission further concludes that the request made by the Company in its application and supported by the direct testimony of Mr. How and Mr. Addison should be adopted, as modified above. The collection of the reserve should commence with the implementation

of the Phase I rates. We adopt the modified Staff and Company adjustment of \$4,919,000. We also grant Staff's proposal to decrease rate base by the amount of unfunded storm damage reserve in the amount of (\$3,038,000). We expressly reject Dr. Ruoff's 30 year amortization proposal, and his request for a delay in establishing the reserve until hearings can be held on the necessity for a funded or unfunded reserve. We see no need for the latter in view of our holding above. We also reject SCEUC's proposal to defer the matter to the Legislature. We believe that this issue must be addressed immediately by this Commission.

L.

Evidence and Conclusions for Finding of Fact No. 20

Upon the identification of the revenue requirements, the Commission is responsible for determining specific rates and the development of a rate structure that will yield the required revenues. It is generally accepted that proper utility regulation requires the exercise of control over the rate structure to insure that equitable treatment is afforded each class of customer.

The Commission's statutory responsibility to fix "just and reasonable rates" has been exercised by the recognition of the objective to provide a utility a fair opportunity to earn a reasonable return, which meets the established revenue requirement and equitably apportions the revenue responsibility among the classes of service. In discharging the Commission's responsibility

to fix "just and reasonable rates", we have traditionally adhered to the following criteria:

...(a) the revenue-requirement or financial-need objective, which takes the form of a fair-return standard with respect to private utility companies; (b) the fair-cost-apportionment objective, which invokes the principle that the burden of meeting total revenue requirements must be distributed fairly among the beneficiaries of the service; and (c) the optimum-use or customer-rationing objective, under which the rates are designed to discourage the wasteful use of public utility services while promoting all use that is economically justified in view of the relationships between cost incurred and benefits received.

Bonbright, Principles of Public Utility Rates (1961), p. 292.

These criteria have been consistently observed by this Commission and again are utilized here.

The cost of supplying electricity to different customer classes is a function of many factors and variables. The allocation of these costs among the different classes of customers represents a complex task, since many of the total costs of producing energy are common to all customers. The procedure generally used by this Commission in analyzing utility costs in the context of the review of rate design provides for the distribution of total costs among three major categories: (1) costs that are a function of the total number of customers, (2) costs that are a function of the volume of the service supplied (energy costs), and (3) costs that are a function of the service capacity of plant and equipment in terms of their capability to carry hourly or daily peak loads (demand costs).

In concluding that rates should be based on cost of service

principles, the Commission espouses the economic theory that regulation is intended to act as a surrogate for competition by insuring that each rate that is charged for electricity is fair and reasonable. That is, that utility rates are maintained at the level of costs, including a fair return on capital. By incorporating cost of service principles, the Commission provides for rates and charges which are designed to promote equity, engineering efficiency (cost-minimization), conservation and stability.

The foundation for an equitable and efficient, cost-based rate structure is a cost of service study, which accounts for the variables and factors from which are derived the costs of supplying electricity to different classes of customers. The cost of service study not only identifies the total cost of service and thereby measures the profitability of the utility, but also identifies cost by function and class of service, and so measures the compensability of service to any one class. Furthermore, the cost of service study is used to assess the propriety of any one particular rate structure in the design of rates. In a sense, a cost of service study functions as a regulatory guide by which the ratemaker can determine the existing rate of return of each class and the manner and extent to which it should be adjusted to achieve cost-based rates.

The Company's Witness Mr. How sponsored the utility's cost study and supported the resultant rates and charges. (Tr. Vol. 4, How, p. 85). The cost of service study and its underlying

assumptions identified three basic types of costs: customer-related, demand-related and energy-related. Following identification (i.e., classification) the test year revenue, expense and rate base items were allocated according to function or purpose. Id. This process is essential to a fair allocation of revenue requirements for the utility system which requires the separation of the costs associated with each customer class and with the utility's jurisdictional (i.e., retail) operations. The proposed rates and charges were based on the four-hour coincident peak responsibility allocation methodology for production and transmission demand-related items, which was supported by the SCEUC, the Commission Staff, Department of Navy, and S.C. Department of Consumer Affairs.

The Company's cost of service study utilized in the design of the proposed rates and charges was founded on embedded costs. The Commission has consistently relied upon the concept of embedded costs as the starting point in the implementation of ratemaking precepts. There is no evidence in the record of this proceeding to cause the Commission to abandon our well-founded reliance upon the principle of embedded cost as a starting point for determining just and reasonable rates. The Staff, Company, Department of Navy, South Carolina Energy Users Committee and the South Carolina Department of Consumer Affairs have entered into a Stipulation in support of the single Four Hour Band Coincident Peak Methodology, which has been utilized by the Company since 1976 and accepted by the Commission in all recent SCE&G rate proceedings. The

Commission hereby adopts this methodology for ratemaking purposes and approves the Company's proposed cost of service study accordingly. The Commission recognizes that the cost of service study is but a tool in the development of appropriate rates for the Company.

It is axiomatic that retail rates should produce rates of return among classes which bear a reasonable relationship to overall rate of return. See, Tr. Vol. 4, How, p. 92. Further, there should be movement towards equal rates of return among the classes.

Accordingly, as per the Stipulation, apart from reconnection fees and the change in the Basic Facilities Charge set forth below, the rate designs proposed by the Company are accepted and approved. (Any reduction in the level or rate increase requested by the Company shall be allocated to customer classes in the same proportion as the Company requested the increase to customer classes.

In its Application, the Company requested a number of changes in its tariffs and terms and conditions of service. The proposals are discussed below.

1.

Rate 1 (Good Cents Rate) and Rate 7 (Conservation Rate)

In its application, the Company proposed to close Rate 1 and Rate 7 and make them unavailable to any new account effective upon order of the Commission. In addition, the Company is requesting that a new Good Cents/Conservation Rate (Rate 6) be approved for

both new and retrofit accounts where customers build to specifications set forth in the rate schedule. The Company also proposes to allow customers currently on Rate 1 to remain on that rate as long as they reside in the home that met the Rate 1 specifications; however, if this customer sold his home, the Company proposes to place the house on the new Rate 6. The Staff supports the Company's request for the implementation of Rate 6 for new and retrofit homes. However, Staff proposes to allow homes constructed under the Rate 1 specifications to remain on Rate 1 even if the home is sold. On November 3, 1995, the Department of Consumer Affairs, The South Carolina Energy Users Committee, the United States Department of the Navy, John C. Ruoff, and the Company entered into a Stipulation in which eligibility for Rate 1 will not terminate upon sale of a premises or change in the individual named in the account. It was further stipulated that customers presently receiving service under Rate 7 will be transferred to new Rate 6. The Commission hereby approves the closing of Rate 1 to any new accounts and accepts the parties stipulation of not terminating eligibility for Rate 1 upon sale of premise or change in ownership for existing Rate 1 accounts as long as the premise meets existing Rate 1 specifications. This Commission further approves the elimination of Rate 7, the creation of a new Rate 6 for new and retrofit homes that meet the tariff standards, and the transfer of existing Rate 7 customers to new Rate 6.

2.

**Rate 12 (Church Service)**

The Company requests that Rate 12 be changed to a flat rate as opposed to the current design of a block rate with a 50,000 kwh break. The majority of the churches in the Company's service territory use substantially less than 50,000 kwh per billing period and therefore a change to a flat rate would have minimal impact on existing customers. The Commission agrees with the Company's position and approves the change from a block rate to a flat rate for Rate 12.

3.

**Rate 16 - Time of Use General Service**

The Company is requesting a reduction in the differential between the on-peak and off-peak prices for Rate 16 and all time of use rates. The Company states that the reason for the reduction is due to a reduction in the cost of installation and operation of the next increment of power which would be an internal combustion turbine. The Commission agrees with the Company's position and approves the reduction in the on-peak and off-peak price differential.

4.

**Rate 24 - Time of Use Large General Service**

The Company is requesting that a six (6) month build up period be made available for Rate 24 similar to that included in Rate Schedules 20 and 23. This change would allow the Company to waive certain conditions regarding determination of billing demand for



the first six months of service for new or expanding accounts. The Company states that this period would allow the customers the opportunity to test and fine tune equipment without incurring the risk of subsequent rate implications. The Company is also requesting the same reduction in the summer on-peak and off-peak price differential as mentioned in Rate 16. The Commission believes these proposed changes to be beneficial to customers and approves both the addition of a six month build up period and the change in rate design for Rate 24.

5.

**Rate 21 - Time of Use General Service**

The Company requests Rate 21 be changed from a KW demand to a KVA demand billed rate. This rate is a companion rate to Rate 20 which is a KVA demand billed rate. The Commission authorizes this change.

6.

**Basic Facilities Charge (BFC)**

All parties of record entered into a stipulation which accepted the basic facilities charges as set forth in a pre-filed exhibit of George How (GCH-5) except that the BFC applicable to Rates 1, 2, 7, 8, 10, and 14 should be approved at the level of \$6.50. This Commission accepts the stipulation and approves the increase in basic facilities charges.

7.

**Miscellaneous Rate Design Issues**

There were several miscellaneous rate design issues included in the Application and in the testimony of Company Witness Mr. How. These changes include the reduction in the number of available options for the Interruptible Service Options, the extension of the contract term for Rate 26 and Residential Subdivision Street Lighting from one to five years, the separation of ornamental lights into different categories and the addition of a 25 foot fiberglass pole and a shoebox type lighting fixture category.

The Staff has reviewed these proposed changes and has agreed that they are just and reasonable and supported by the evidence in the record. The Commission agrees and hereby authorizes these changes.

8.

**Changes to Individual Rates**

In its Application the Company has proposed to increase its rates and charges to certain contracts under which it provides service to customers, those contracts being subject to the regulatory authority of the Commission. The customers in question are: Savannah River Site, the State Line accounts, Union Camp Corporation, Westvaco Corporation, SMI Steel Corporation, Foster Wheeler Corporation and Contracted Lighting customers. The requested changes are set forth in exhibits to the Application. The Commission has reviewed these changes and finds these rates and charges should be reduced in proportion to the increase approved.

9.

Reconnection Charge

The Company proposes that its reconnection charge be increased from \$15.00 to \$25.00 during normal hours, and \$15.00 to \$35.00 during after hours. These charges have not been adjusted since June 7, 1993 in Docket No. 92-619-E, Order No. 93-465 when they were raised from \$5.00 to \$15.00. The Company, in Exhibit B to its Application dated July 10, 1995, Proposed General Terms and Conditions, Pages 5 and 6 of 8, lists under Section III-J reasons for disconnection of service.

As indicated in the testimony of Commission Staff Witness Mr. Sharpe and Company Witness Mr. How, the Company's actual cost in performing reconnections seems to justify the proposed charges. However, as pointed out in the brief of the Consumer Advocate, emergency crews capable of doing reconnections are already on duty 24 hours a day. Even though these crews primarily are on duty for emergencies, they do perform reconnections. We agree with the Consumer Advocate that the presence of these crews lowers the Company's marginal cost of reconnection. Also, we believe that an increase in the reconnection charge would weigh heavily on the low income customers, the group that could least afford it. We therefore deny the proposed increase.

10.

General Terms and Conditions

The Company and the Intervenor, in the Stipulation (Hearing Exhibit Number 1) have agreed to certain changes in the language

incorporated into the Company's proposed General Terms and Conditions other than that related to reconnection charges discussed above. These proposed changes have not been challenged by the Staff. The Commission finds that the proposed changes as modified by the Stipulation, are just and reasonable and are hereby approved.

M.

Evidence and Conclusions for Finding of Fact No. 21

After the end of Dr. Julius Wright's rebuttal testimony, SCEUC counsel Mr. Fusco moved that the Commission disallow Dr. Wright's presentation because, according to Mr. Fusco, there were certain typographical and punctuation errors. He asserted that the presence of these errors require the Commission to strike Dr. Wright's testimony. We think that these alleged errors do not affect the admissibility of Dr. Wright's testimony.

The Commission rules that the testimony of Dr. Wright is admissible and should remain a part of the evidence in this case.

V.

DECREE

WHEREFORE, it is ordered:

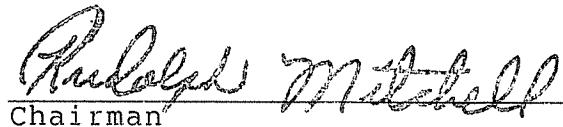
1. That South Carolina Electric & Gas Company shall implement the rate schedules that conform to the findings incorporated in this Order. See Attachments B and C. The rates shall be designed in accordance with the designs in the Application filed by the Company. Phase I rates shall be effective January 15, 1996 or at such date thereafter that the commercial operation of

the Cope Plant commences. Phase II rates shall be effective with the first billing cycle of January 1997.

2. That SCE&G shall within ten (10) days from the date of this Order file with the Commission rate schedules that incorporate the findings in this Order.

3. That this Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

  
Chairman

ATTEST:

  
Executive Director

(SEAL)

**Commissioner Warren D. Arthur, IV, dissenting:**

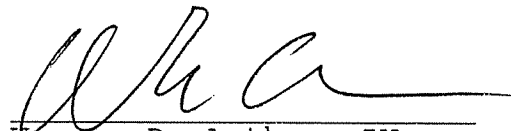
I dissent from the Commission's decision regarding the rate of return on equity. Although this Commission voted 5 - 2 on a rate of 12%, I believe that the rate should be no higher than 11.75%. 11.75% is the high end of Staff's return on equity range and exceeds the highest proposed number endorsed by the Consumer Advocate by twenty-five basis points. As I have stated in a recent dissenting opinion, I am disturbed by the Commission's repeated disregard of the testimony of Commission Staff and Consumer Advocate witnesses, especially for decisions on rate of return on equity.

Subsequent to this decision, the Commission has adopted rates of return on equity well above the rates proposed by the Staff and the Consumer Advocate. Both Order No. 95-1649 for Piedmont Natural Gas's recent rate case and Order No. 95-1757 for BellSouth's investigation of overearnings elucidate this point. I feel that the Commission should give more consideration to all parties' return on equity proposals, especially when such proposals are well-supported by credible testimony. Staff endeavors to provide a balanced view between a company's interests and the interests of the Consumer Advocate, and such a balance should be remembered in our considerations and decisions.

Further, I believe that the trend of decline in long-term interest rates clearly exhibits downward pressures which indicate that a lower cost of equity is appropriate. Interest rates and the cost of equity move in the same direction, and interest rates

therefore are an important factor utilized in determining the appropriate rate of return on equity. When using a Capital Asset Pricing Model with a constant risk premium, a one to one correlation exists between interest rates and the resulting cost of equity. In Docket No. 92-619-E, Order No. 93-465, on June 7, 1993, the Commission approved a return on equity of 11.5% to 12.0% for SCE&G and set electric rates based on a 11.5% return on equity. The yield on thirty-year treasury bonds was approximately 7.0% at that time. On December 27, 1995, the Commission approved a return on equity of 12.0% for SCE&G in Docket No. 95-1000-E, Order No. 96-15. The yield on thirty-year treasury bonds was approximately 6.0% at that time. Thus, long term interest rates have declined by approximately 100 basis points from the former rate proceeding until this proceeding and have continued to drop. However, the Commission effectively approved a 50 basis point increase in SCE&G's allowed return on equity from 11.5% to 12.0% while interest rates declined about 100 basis points from 7.0% to 6.0%. The correlation between rate of return and interest rates would result in a lowering of the allowed return on equity of as much as 100 basis points, not an increase of 50 basis points.

Respectfully submitted,



Warren D. Arthur, IV  
Commissioner, Sixth District

**EXHIBIT**

11/6/95

#1

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 95-1000-E

NOVEMBER 3, 1995

IN RE: Application of South Carolina	)	STIPULATION OF THE
Electric & Gas Company For	)	SOUTH CAROLINA
Adjustments in the Company's	)	DEPARTMENT OF CONSUMER
Electric Rates and Tariffs	)	CONSUMER AFFAIRS, THE
	)	SOUTH CAROLINA ENERGY
	)	USERS COMMITTEE, THE
	)	UNITED STATES
	)	DEPARTMENT OF THE NAVY,
	)	SOUTH CAROLINA ELECTRIC
	)	& GAS COMPANY, JOHN C.
	)	RUOFF

WHEREAS, The parties to this stipulation are the South the South Carolina Department of Consumer Affairs, The United States Department of the Navy (representing all Department of Defense interests), The South Carolina Energy Users Committee, the South Carolina Electric & Gas Company, John C. Ruoff all of which are collectively referred to hereinafter as the "Parties";

WHEREAS, the Applicant has prepared and filed an Application seeking certain changes in its electric rates, charges, terms and conditions of service and tariffs;

WHEREAS, the Parties have carefully reviewed the information contained in that Application and supporting exhibits;

WHEREAS, since the filing of the Application, the Parties have engaged in lengthy discovery wherein hundreds of pages of



information related to the matters at issue in this docket have been exchanged;

WHEREAS, the Staff has audited the books and records of the Applicant relative to the matters raised in the Application;

WHEREAS, the Parties have prepared and pre-filed written testimony in this docket;

WHEREAS, pre-hearing conferences were held in the Offices of the Public Service Commission on October 2, 1995; October 19, 1995; November 1, 1995, with notice to all parties, which conferences were open to the public, wherein the points of agreement and disagreement between the Parties were openly discussed;

WHEREAS, the Parties have agreed to, and hereby stipulate to, the following matters, which if adopted by the Commission in the order on the merits in this proceeding will, within the scope of the matters addressed herein, result in rates, terms and conditions of electric service which are just, reasonable, nondiscriminatory and supported by the evidence in the record of the proceeding.

1. The Parties stipulate that the proper capitalization for determining SCE&G's rates and charges shall be the capitalization of September 30, 1995 set forth in the updated capital structure filed on October 19, 1995 as revised Exhibit D-VII.
2. The Parties stipulate and agree to the updated capital costs, O&M expenses and depreciation expenses related to the

*WJC*  
Cope plant ~~and reserves~~ as set forth in the supplemental testimony of Company Witness Addison and accompanying Exhibit JEA-1 and in PSC Staff Report.

3. *WJC*  
The Parties stipulate and agree that the property taxes related to the Cope plant shall be included in Phase II of the requested rate increase at a level reflecting the millages applicable in the county and other taxing districts where the plant is located on November 30, 1996.

*3 WJC JCR*  
The Parties stipulate and agree that the balance in the deferred asset account, including accumulated carrying costs, related to Demand-Side Management Programs shall be amortized over five years. The amortization of the demolition expenses for the Parr and Hagood Plants shall also be amortized over five years.

*4. WJC JCR*  
As set forth in the testimony of the Staff of the South Carolina Public Service Commission, eligibility for Rate 1, the Good Cents Rate, shall not terminate upon sale of a premises or change in the individual named in the account. In addition, customers presently receiving service under Rate 7 shall be transferred to new Rate 6.

*5. WJC JCR*  
The Parties stipulate and agree to the other changes in terms and conditions as proposed by Mr. John C. Ruoff and set forth in the attached Exhibit.

*6. WJC JCR*  
The Basic Facilities Charge as set forth in pre-filed exhibit of George How (GCH-5) are appropriate except that the BFC applicable to Rates 1, 2, 7, 8, 10 and 14, should be

approved at the level of \$6.50.

mcJ. X.  
JCR  
AAR

Apart from re-connection fees, and the change in Basic Facilities Charge set forth above, the rate designs proposed by the Company are accepted. Any reduction in the level of rate increase requested by the Company shall be allocated to customer classes in the same proportion as the Company requested the increase to customer classes. Any reduction in the level of storm damage reserve requested by the Company shall be allocated to customer classes in the same proportion as the Company requested the amount to customer classes.

WHEREFORE, the Parties hereto so stipulate and agree:

Nancy Vaughn Coombs  
Nancy Vaughn Coombs  
Deputy Consumer Advocate  
South Carolina Department  
of Consumer Affairs

Arthur G. Fusco  
Arthur G. Fusco  
Attorney

South Carolina Energy  
Users Committee as to Paragraph 8

Audrey Van Dyke  
Audrey Van Dyke  
General Counsel  
Department of the Navy

Belton T. Zeigler  
Belton T. Zeigler  
General Counsel  
South Carolina Electric  
& Gas Company

John C. Ruoff  
John C. Ruoff

IV. E. The Company may make reasonable charges for work performed on or services rendered:

1) upon Customer's request at the Customer's premises when, at the time the request is made, service and equipment provided by the Company is in good working condition and in compliance with these General Terms and Conditions, Specifications for Service and Meter Installations, existing provisions of the National Electric Code, the Regulations of the National Board of Fire Underwriters and such other regulations as may be promulgated from time to time by any municipal bureau or other governmental agency having jurisdiction over the Customer's installation or premises;

2) to repair, replace, remove or gain access to Company's facilities or equipment where such repair, replacement or removal is made necessary by the willful action(s) of the Customer, members of the Customer's household or invitees of the Customer; or

3) To repair, replace, remove or gain access to Company's facilities or equipment where such repair, replacement or removal is made necessary by the negligent failure of the Customer to take timely action to correct or to notify the Company or other responsible party to correct conditions which led to the needed repair, replacement or removal, except that such charges shall be apportioned between the Customer and the Company to the extent that the Customer shall only bear that part of the costs which reflect the costs added by the Customer's negligence. Such charges cannot be assessed where the damage is caused by an Act of God except to the extent that the Customer failed timely to mitigate the damages.

Such charges may include labor, material and transportation.